

Amendment and Response

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Serial No.: 09/600,432

Confirmation No.: 3387

Filed: October 2, 2000

For: PEPTIDES WITH β 1 INTEGRIN SUBUNIT DEPENDENT CELL ADHESION MODULATING ACTIVITY**Amendments to the Claims**

This listing of claims replaces all prior versions, and listings, of claims in the above-identified application:

1. (canceled)
2. (canceled)
3. (canceled)
4. (canceled)
5. (canceled)
6. (currently amended) A peptide of no more than about six amino acid residues, said peptide having the sequence Pro-Arg-Ala-Arg-Ile-Tyr (SEQ ID NO:24), Arg-Ala-Arg-Ile-Tyr (SEQ ID NO:25), Ala-Arg-Ile-Tyr (SEQ ID NO:26), or Arg-Ile-Tyr, wherein said peptide retains a C-terminal Ile-Tyr dipeptide sequence.
7. (previously presented) The peptide of claim 6 wherein said peptide modulates β 1 integrin subunit dependent adhesion.
8. (previously presented) The peptide of claim 7 wherein said peptide inhibits β 1 integrin subunit dependent adhesion.
9. (previously presented) The peptide of claim 7 wherein said peptide modulates α 4 β 1 integrin dependent adhesion.
10. (previously presented) The peptide of claim 9 wherein said peptide inhibits α 4 β 1 integrin dependent cell adhesion.

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11. (previously presented) The peptide of claim 10 wherein said peptide inhibits α 4 β 1 integrin dependent adhesion of Ramos cells to α 4 β 1 integrin binding fibronectin fragments.

12. (canceled)

13. (canceled)

14. (canceled)

15. (canceled)

16. (canceled)

17. (canceled)

18. (canceled)

19. (canceled)

20. (canceled)

21. (canceled)

22. (canceled)

23. (withdrawn) A method for modulating the adhesion of cells to a substrate, the method comprising:

combining a peptide of claim 6 with a suspension of said cells to form a modified cell suspension; and

contacting the modified cell suspension with the substrate.

24. (withdrawn) A method of claim 23 wherein the peptide modulates β 1 integrin subunit dependent adhesion.

25. (withdrawn) The method of claim 24 wherein the peptide inhibits β 1 integrin subunit dependent adhesion.

26. (withdrawn) The method of claim 25 wherein the β 1 integrin is α 4 β 1.

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27. (withdrawn) The method of claim 24 wherein the β 1 integrin is α 4 β 1 .
28. (withdrawn) A method of inhibiting α 4 β 1 integrin dependent adhesion of cells to integrin-binding fibronectin fragments, the method comprising:
combining a peptide of claim 6 with the cells to form a modified cell suspension; and
contacting the modified cell suspension with the integrin-binding fibronectin fragments.
29. (previously presented) A peptide consisting of the sequence Pro-Arg-Ala-Arg-Ile-Tyr (SEQ ID NO:24), Arg-Ala-Arg-Ile-Tyr (SEQ ID NO:25), Ala-Arg-Ile-Tyr (SEQ ID NO:26), or Arg-Ile-Tyr.
30. (withdrawn - currently amended) A peptide of no more than about ten amino acid residues, said peptide having the sequence Pro-Arg-Ala-Arg-Ile-Tyr (SEQ ID NO:24), Arg-Ala-Arg-Ile-Tyr (SEQ ID NO:25), Ala-Arg-Ile-Tyr (SEQ ID NO:26), or Arg-Ile-Tyr, and wherein said peptide retains a C-terminal Ile-Tyr dipeptide sequence.
31. (withdrawn - currently amended) A peptide of no more than about 25 amino acid residues, said peptide having the sequence Pro-Arg-Ala-Arg-Ile-Tyr (SEQ ID NO:24), Arg-Ala-Arg-Ile-Tyr (SEQ ID NO:25), Ala-Arg-Ile-Tyr (SEQ ID NO:26), or Arg-Ile-Tyr, wherein said peptide modulates β 1 integrin subunit dependent adhesion, and wherein said peptide retains a C-terminal Ile-Tyr dipeptide sequence.
32. (withdrawn - currently amended) A peptide of no more than about 50 amino acid residues, said peptide having the sequence Pro-Arg-Ala-Arg-Ile-Tyr (SEQ ID NO:24), Arg-Ala-Arg-Ile-Tyr (SEQ ID NO:25), Ala-Arg-Ile-Tyr (SEQ ID NO:26), or Arg-Ile-Tyr, wherein said peptide modulates β 1 integrin subunit dependent adhesion, and wherein said peptide retains a C-terminal Ile-Tyr dipeptide sequence.

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33. (withdrawn - currently amended) A peptide of up to about 100 amino acid residues, said peptide having the sequence Pro-Arg-Ala-Arg-Ile-Tyr (SEQ ID NO:24), Arg-Ala-Arg-Ile-Tyr (SEQ ID NO:25), Ala-Arg-Ile-Tyr (SEQ ID NO:26), or Arg-Ile-Tyr, wherein said peptide modulates β 1 integrin subunit dependent adhesion, and wherein said peptide retains a C-terminal Ile-Tyr dipeptide sequence.

34. (previously presented) The peptide of claim 33 wherein said peptide inhibits α 4 β 1 integrin dependent adhesion of Ramos cells to α 4 β 1 integrin binding fibronectin fragments.

35. (withdrawn - currently amended) A peptide having the sequence Pro-Arg-Ala-Arg-Ile-Tyr (SEQ ID NO:24), Arg-Ala-Arg-Ile-Tyr (SEQ ID NO:25), Ala-Arg-Ile-Tyr (SEQ ID NO:26), or Arg-Ile-Tyr, wherein said peptide modulates β 1 integrin subunit dependent adhesion, and wherein said peptide retains a C-terminal Ile-Tyr dipeptide sequence.

36. (previously presented) The peptide of claim 35 wherein said peptide inhibits α 4 β 1 integrin dependent adhesion of Ramos cells to α 4 β 1 integrin binding fibronectin fragments.